CLAIMS LISTING

The following claim listing will replace all prior claims in the application.

Claims 1-10: (Cancelled)

11. (Previously Presented) A system for delivering personalized and localized ad content to multiple users each having an A/V display comprising:

a plurality of Intelligent Control Modules (ICM), each ICM being operationally coupled to an A/V display for displaying personalized and localized ad content during programming commercial breaks, wherein each ICM being configured to determine user personalized and localized ad schedules pertaining to channels and time; and

an Ad Center having multi-directional communications links with said plurality of Intelligent Control Modules to receive each user's personal and location attributes; said Ad Center including a repository unit for storing user information and ad agency or advertiser information; at least one of said ICMs and Ad Centers being configured to analyze ads, ad agencies, advertisers, and user info and to select personalized and localized ad content for each ICM based on its corresponding personal and location attributes to transmit user's personal and local attributes, ad content, programming content from service providers, user ad search and follow-up requests, and software and firmware updates, wherein said Ad Center is independent from the service providers and includes one interface for each service provider;

wherein users can follow-up and search for additional ad information through one or more telecommunication sources connected to their ICM.

12. (Previously Presented) The system of claim 11, wherein the Ad center further comprises:

a receiving unit configured to receive at least one of TV channels, programs, and ad content from at least one of satellite TV providers, cable TV providers, TV stations, terrestrial TV providers, Internet TV providers, and IPTV;

a repository unit configured to store advertiser information, ad agency information, ad information, and user information;

an ad database configured to store at least one of ads, expired ad information, and ad follow-up information;

an ad output decision making unit configured to perform data processing and decision making based on ad attributes and user attributes associated with each ICM;

an ad input/output unit configured to handle communication with at least one of the ICM and external sources, said communication including distribution of ad sets and/or ad schedules to the intelligent control modules upon generation of user directed ad sets and/or user personalized and localized ad schedules by the ad output decision making unit, user information from the repository unit to intelligent control modules, receipt of user requests, transmission of upload information on user viewing patterns and/or ad preferences from intelligent control modules; and

an ad control unit configured to control and monitor all components of said ad center and to process and dispatch information for, and request and control software updates for the ICM.

13. (Previously Presented) The system of claim 12, wherein the user information includes at least one of access card information, localization information, user attributes, and user viewing patterns and ad preferences collected by the Intelligent Control Modules.

14. (Previously Presented) The system of claim 11, wherein service providers comprise at least one of a terrestrial TV service provider, a cable TV provider, a satellite TV provider, an Internet TV service provider, an Internet Protocol (IP) TV service provider, an independent content service provider, a provider affiliated with said aforementioned service providers, and an independent personalized and localized ad service provider.

15. (Previously Presented) The system of claim 11, wherein the ICM comprises an independent module integrated with at least one of a TV, a TV set top box, the A/V display, and a computer.

16. (Previously Presented) The system of claim 11, wherein the ICM comprises an autonomous device residing separate from at least one of a TV, a TV set top box, the A/V display and a computer.

17. (Previously Presented) The system of claim 11, wherein the ICM further comprises:

an ad decision support unit configured to collect user viewing patterns based on intelligent programs and event triggering mechanisms, wherein expert business rules and mathematical and statistical models are established on user and ad attributes information, including viewing patterns and user ad preferences;

an ad repository unit configured to store personalizable and localizable ads and non-personalizable and non-localizable ads, which are updated in real-time by the ad center and removed in real-time based on their expiration attributes;

an ICM control unit configured to control and monitor all components in the ICM and to detect TV commercial times for showing of personalized and localized ads based on ad schedule

generated by the ad decision support unit through a pre-configured ad channel or the current program channel;

a user information unit configured to store user attribute information, which is updated through the repository unit, and to store user viewing patterns collected by the ad decision support unit and ad preferences set up by the user;

an ad follow-up unit configured to follow up ads for additional or more detailed video and/or data information in real-time or at a later time;

an ad preference setup unit configured to help users setup their ad preferences for a certain period of time, which are used by the ad decision support unit to generate the appropriate personalized and localized ad schedule, wherein ad preferences are based on ad classifications implied by ad attributes, shopping plans for a certain period;

an ad search unit configured to search and browse ads with ad attributes and keywords;

an input/output unit configured to transmit input and output information with interfaces including at least one of the ad center, TV service providers, A/V displays, TV and internet; and

a remote control unit configured to be used by users to control functions supported by the intelligent control module.

18. (Previously Presented) A method for delivering personalized and localized ad content to multiple users each having an A/V display, comprising the steps of:

providing a plurality of Intelligent Control Modules (ICMs), each ICM displaying personalized and localized ad content during programming commercial breaks on an A/V display, wherein each ICM being configured to determine user personalized and localized ad schedules pertaining to channels and time;

establishing a multi-directional communications link between said plurality of ICM's and an Ad Center for transmission of user's personal and location attributes, ad content, and/or programming content from service providers, user ad search and follow-up requests, software and firmware updates to each ICM with said Ad Center; said Ad Center including a repository unit for storing user information and ad agency or advertiser information, wherein said Ad Center is independent from the service providers and includes one interface for each service provider;

analyzing ads, ad agency, advertiser, and user info and selecting personalized and localized ad content for each ICM based on its corresponding personal and location attributes; and

connecting one or more telecommunication sources to each ICM, so that users can follow-up and search for additional ad info.

19. (Previously Presented) The method according to claim 18, wherein the step of selecting personalized and localized ad content further comprises performing the ad follow-up request and/or ad search via a first path, said first path comprising the steps of:

determining if an ad repository in the ICMs includes additional video and/or data information for a user-interested ad;

performing at least one of an ad follow-up and search directly against the Ad Repository within the Intelligent Control Modules; and

displaying follow-up details to the users about the user-interested ad via the A/V Display.

20. (Previously Presented) The method of claim 18, wherein the step of selecting personalized and localized ad content further comprises performing the ad follow-up request and/or ad search via a second path, said second path comprising the steps of:

sending at least one of the ad follow-up and ad search requests through an ICM Input/Output Unit in at least one of the ICMs to the Ad Center;

conducting at least one of an ad follow-up and ad search in an Ad Database in the Ad Center; and

transmitting matching results back to the applicable Intelligent Control Module for viewing.

21. (Previously Presented) A method in accordance with claim 20, wherein the second path further comprises the steps of:

searching the matching results for additional and online video and data information; and

providing at least one of a follow-up ad and an internet website to the requesting user.

22. (Previously Presented) The method of claim 18, wherein the step of selecting personalized and localized ad content further comprises performing the ad follow-up request and/or ad search via a third path, said third path comprising the step of:

sending at least one of the ad follow-up and ad search requests via an internet connection port on the Intelligent Control Modules.

23. (Previously Presented) The method of claim 18, further comprising the steps of:

providing an Ad Decision Support Unit in at least one ICM for generating a user personalized and localized ad schedule; and

providing an ICM control unit for playing recommended ads to the user based on the ad schedule, wherein triggering of intelligent programs within the Ad Decision Support Unit is event-based.

24. (Previously Presented) The method of claim 23, further comprising the steps of:

performing personalization and localization processing by the Ad Decision Support Unit based on ad and user attributes;

determining an applicable ad set for transmission to the user's Intelligent Control Modules; and

determining ad schedules pertaining to a user if the user's viewing patterns and ad preferences are available, wherein the ad and user attributes are collected and processed by at least one of the Ad Decision Support Units and an Ad Center Output Decision Support Unit for determining at least one of the user personalized and localized ad schedules and at least one applicable ad set.

25. (Previously Presented) The method of claim 18, further comprising the steps of:

the Ad Center and the Intelligent Control Modules communicating and exchanging information in real-time with an event-driven mechanism via the Ad Center Input/Output Unit and the ICM Input/Output Unit;

determining at least one of user applicable and personalized and localized ad sets and ad schedules; and

updating the Ad Center based on at least one of an addition, change or removal of an ad, user information or user attribute.